

REMARKS

This application has been amended in a manner that is believed to place in condition for allowance at the time of the next Official Action.

Claims 16-32 are pending in the present application. Claims 16-23 have been amended to more particularly point out and distinctly claim the present invention. Claims 24-32 have been added to vary the scope of the claimed invention. Support for claims 24-32 may be found in claims 16-23 and generally throughout the specification.

In the outstanding Official Action, it was alleged that applicants had not complied with the requirements of 37 CFR §1.63(c) because the application data sheet did not acknowledge the filing of any foreign applications. However, applicants note that the application data sheet filed with the present application indicates that the present application is a 371 of PCT/NL98/00721, filed on December 18, 1998. Moreover, the application data sheet indicates that the present application claims priority to application PCT/NL97/00710, filed on December 18, 1997. Applicants also note that the Combined Declaration and Power of Attorney executed by the inventors of the present application indicates that the present application claims priority to these same applications. As a result, applicants

believe that the application is in good order and ask that the request for a new application data sheet be withdrawn.

Claim 23 was rejected under 35 USC §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants believe that the present amendment obviates this rejection.

In imposing the rejection, the Official Action alleged that it was unclear how many components were recited in the claim. Moreover, the Official Action objected to the term "biscuit dried granule". However, applicants believe that claim 23 has been amended in a manner so that it is definite to one of ordinary skill in the art.

Claim 23 recites a soup, stew, sausage, spread, puree, biscuit, dried granule, tablet, capsule, powder, solid food, or liquid food, comprising a meat product according to claim 16 as an ingredient. Thus, while the meat product according to claim 16 is included as an ingredient, the claim is open-ended and does not exclude additional components or ingredients. Moreover, as noted above, claim 16 has been amended so that the term "biscuit dried granules" no longer appears in the claim. As a result, applicants believe that claim 23 is definite to one of ordinary skill in the art.

Claims 16, 17, 18, 19, 21 and 23 were rejected under 35 USC §102(b) as allegedly being anticipated by YAMAMOTO et al. or MOLNAR et al. This rejection is respectfully traversed.

Applicants believe that neither publication discloses or suggests the claimed invention. YAMAMOTO et al. describe the culturing of smooth muscle cells and tissue in collagen gels. However, the disclosed method is not suitable for the production of meat products for human and/or animal consumption. Indeed, on page 13, column 1, YAMAMOTO et al. mention that the cells are cultured in bovine serum supplemented with penicillin, streptomycin, and recombinant growth factors. The serum and the supplements used in the study make the disclosed product unsuitable for human or animal consumption. As a result, YAMAMOTO et al. fail to anticipate the claimed invention.

As to MOLNAR et al., an experimental model system is disclosed for studying post natal muscle development. While MOLNAR et al. may describe the production of a muscle product, the system taught by MOLNAR et al. is not aimed at and not suitable for human or animal consumption. For example, MOLNAR et al. teach the addition of "DMEM containing 20% fetal bovine serum (FBS)". The use of DMEM serum renders this product unsuitable for human or animal consumption. As the product is not suitable

for at least one of human and animal consumption, the MOLNAR et al. publication cannot anticipate the claimed invention.

Applicants also note that the satellite cells are not grown in a real 3D network. Most of the network is a carrier material, e.g., micro carrier beads, and not cells. Moreover, the experiments do not go further than 1 cell cycle. As a result, applicants do not believe that the publication discloses a three-dimensional form of cells suitable for human or animal consumption.

Thus, in view of the above, applicants believe that MOLNAR et al. fail to anticipate the claimed invention.

At this time, the Examiner's attention is also directed to independent claim 25. Independent claim 25 recites a meat product wherein the product is "free of substances not suitable for human or animal dietary consumption". Claims 26-31 are dependent on claim 25. Claim 32 is dependent on claim 30.

As noted above, neither publication is directed to a meat product. Indeed, both publications disclose tissue culture experiments which rely on the use of components that are unfit for human or animal consumption. As a result, applicants believe that neither publication anticipates claims 25-32.

In the outstanding Official Action, claim 22 is rejected under 35 USC §103(a) as allegedly being unpatentable

over YAMAMOTO et al. or MOLNAR et al. This rejection is respectfully traversed.

In imposing the rejection, the Official Action acknowledges that neither YAMAMOTO et al. nor MOLNAR et al. teaches the potential scale of the process or the amount of product produced. However, the Official Action alleges that changes in the size of a product, wherein the product did not perform differently than the prior art, are not sufficient to overcome the prior art.

However, as noted above, the claimed meat product is distinct and similar to any of the products disclosed in the cited publications. Claim 22 is not directed to the mere scaling up of a prior art process capable of being scaled up.

Indeed, the YAMAMOTO et al. and MOLNAR et al. publications both fail to disclose or suggest a meat product. Rather, the YAMAMOTO et al. publication is concerned with the retardation of rabbit arterial smooth muscle cells in three-dimensional primary culture. YAMAMOTO et al. fail to make any reference to a meat product or food product.

The MOLNAR et al. publication is directed to skeletal muscle satellite cells cultured in simulated microgravity. The model used by MOLNAR et al. can be used to study post-natal

muscle development. MOLNAR et al. fail to disclose or suggest a food product or meat product.

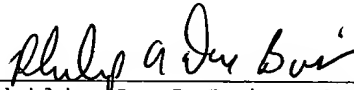
As a result, applicants believe that one of ordinary skill in the art would lack the motivation and reasonable expectation of success of combining and modifying the teachings of YAMAMOTO et al. and MOLNAR et al. to obtain the invention of claims 16-32.

Thus, in view of the above, it is believed this application is now in condition for allowance, with claims 16-32, as presented. Allowance and passage to issue on that basis are accordingly respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item(s):

- copy of Application Data Sheet and date-stamped
postcard receipt



6/19/00

ATTACHED IS A NATIONAL STAGE OF
PATENT APPLICATION. PCT/NL98/00721

Ref. BO 42358

INVENTOR/S: Willem Frederik VAN EELEN, Willem Jan
VAN KOOTEN, Wiete WESTERHOF and
TITLE: Christine Lindsay MUMMERY

INDUSTRIAL PRODUCTION OF MEAT OUTSIDE
THE BODY (IN VITRO)

CONSISTING OF: FORM PTO-1390 with

18 PAGES SPECIFICATION

23 CLAIMS

- SHEETS DRAWINGS

NO DECLARATION

X PRELIMINARY AMENDMENT, SEARCH REPORT, INTER-
NATIONAL PRELIMINARY EXAMINATION REPORT, APPLI-

PLEASE INDICATE SERIAL NUMBER AND FILING DATE

AT RIGHT.

CATION DATA SHEET, CHECK NO. 17032 for
\$1,024., FORM PCT/IB/306.

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APPLICATION INFORMATION

Title Line One:: INDUSTRIAL PRODUCTION OF MEAT OUTSIDE
Title Line Two:: THE BODY (IN VITRO)
Application Type:: UTILITY
Docket Number:: BO 42358 ACW

REPRESENTATIVE INFORMATION

Representative Customer Number:: 000466

CONTINUITY INFORMATION

This application is a:: 371 OF
>Application One:: PCT/NL98/00721
Filing Date:: DECEMBER 18, 1998

PRIOR FOREIGN APPLICATION

Foreign Application One:: PCT/NL97/00710
Filing Date:: DECEMBER 18, 1997
Country:: THE NETHERLANDS
Priority Claimed:: YES